

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BASIN POND	Lake Area (ha):	11.53
Town: CHATHAM	Maximum depth (m):	3.9
County: Carroll	Mean depth (m):	1.2
River Basin: Saco	Volume (m ³):	133000
Latitude: 44°16'15" N	Relative depth:	1.0
Longitude: 71°01'30" W	Shore configuration:	1.54
Elevation (ft): 662	Areal water load (m/yr):	44.31
Shore length (m): 1850	Flushing rate (yr ⁻¹):	38.30
Watershed area (ha): 746.6	P retention coeff.:	0.38
% watershed ponded: 0.0	Lake type:	artificial

BIOLOGICAL:

		9 March 1998	4 August 1997
DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANTS	DINOBYRON 35%
	#2		SYNURA 25%
	#3		TETRAEDRON 25%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			8.69
DOM. ZOOPLANKTON (% TOTAL)	#1	NONE OBSERVED	NAUPLIUS LARVA 71%
	#2		
	#3		
ROTIFERS/LITER			32
MICROCRUSTACEA/LITER			332
ZOOPLANKTON ABUNDANCE (#/L)			396
VASCULAR PLANT ABUNDANCE			Scat/Common
SECCHI DISK TRANSPARENCY (m)			3.0
BOTTOM DISSOLVED OXYGEN (mg/L)		13.0	4.4
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: BASIN POND

Town: CHATHAM

	9 March 1998		4 August 1997		
DEPTH (m)	1.5		1.0		3.0
pH (units)	6.0		6.6		6.5
A.N.C. (Alkalinity)	2.2		4.3		4.4
NITRATE NITROGEN	< 0.05		< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.10		0.40		0.40
TOTAL PHOSPHORUS	0.004		0.011		0.015
CONDUCTIVITY (μ mhos/cm)	17.5		19.8		
APPARENT COLOR (cpu)	12		40		43
MAGNESIUM			0.41		
CALCIUM			1.9		
SODIUM			1.1		
POTASSIUM			0.26		
CHLORIDE	< 2		< 2		< 2
SULFATE	3		2		2
TN : TP	25		36		27
CALCITE SATURATION INDEX			3.8		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1997

D.O. S.D. PLANT CHL TOTAL CLASS

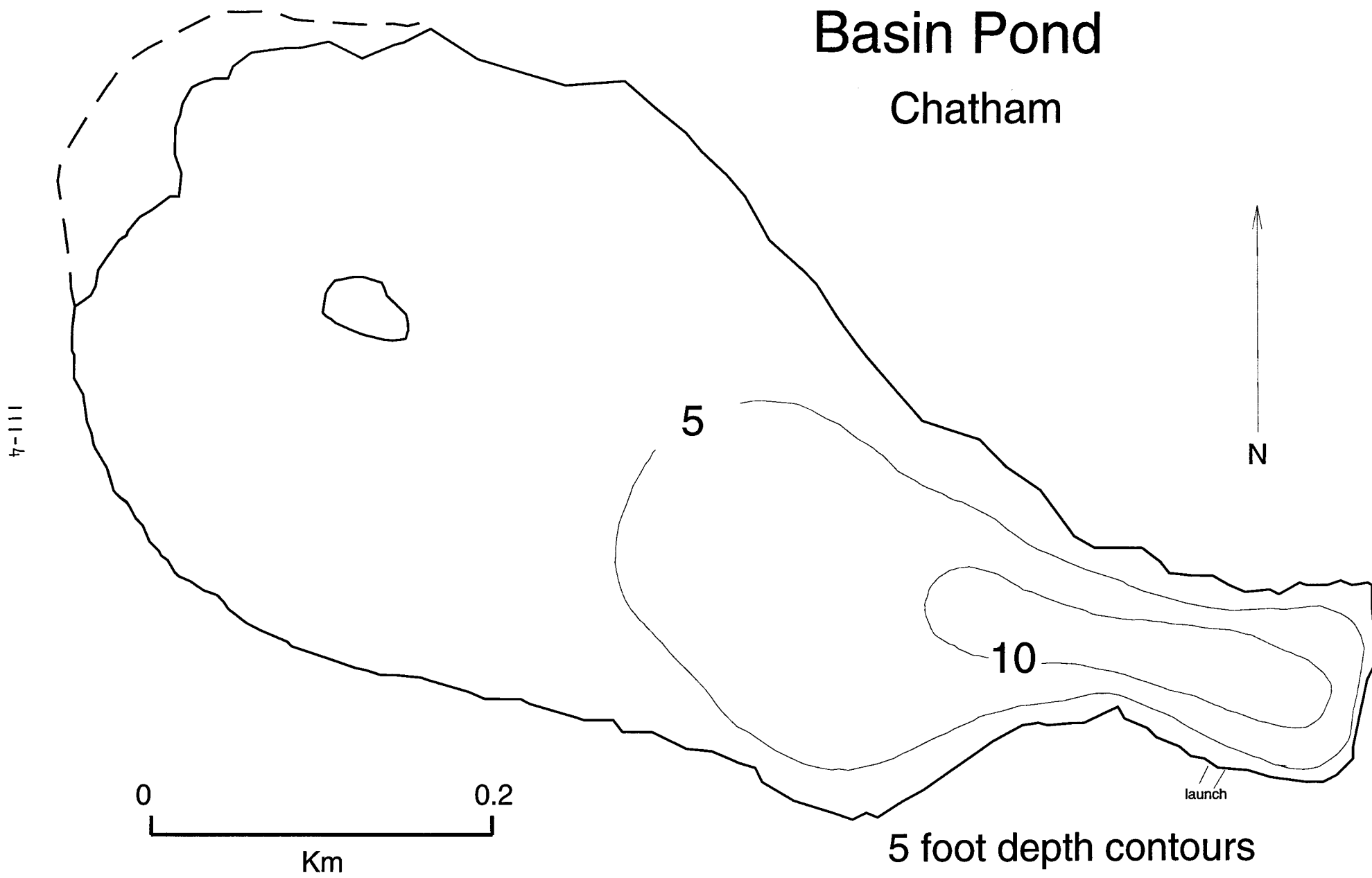
**	3	2	2	7	Meso.
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COMMENTS:

1. This pond is located in the White Mountain National Forest adjacent to the Basin Campground. It is a man-made pond, created by an earthen dam in 1969. It has a boat launch, wheelchair-accessible fishing dock and picnic area.
2. Fish and Game personnel sampled fish populations during the water quality survey.

Basin Pond

Chatham



FIELD DATA SHEET

LAKE: BASIN POND	TOWN: CHATHAM
DATE: 08/04/97	WEATHER: SUNNY; LIGHT BREEZE

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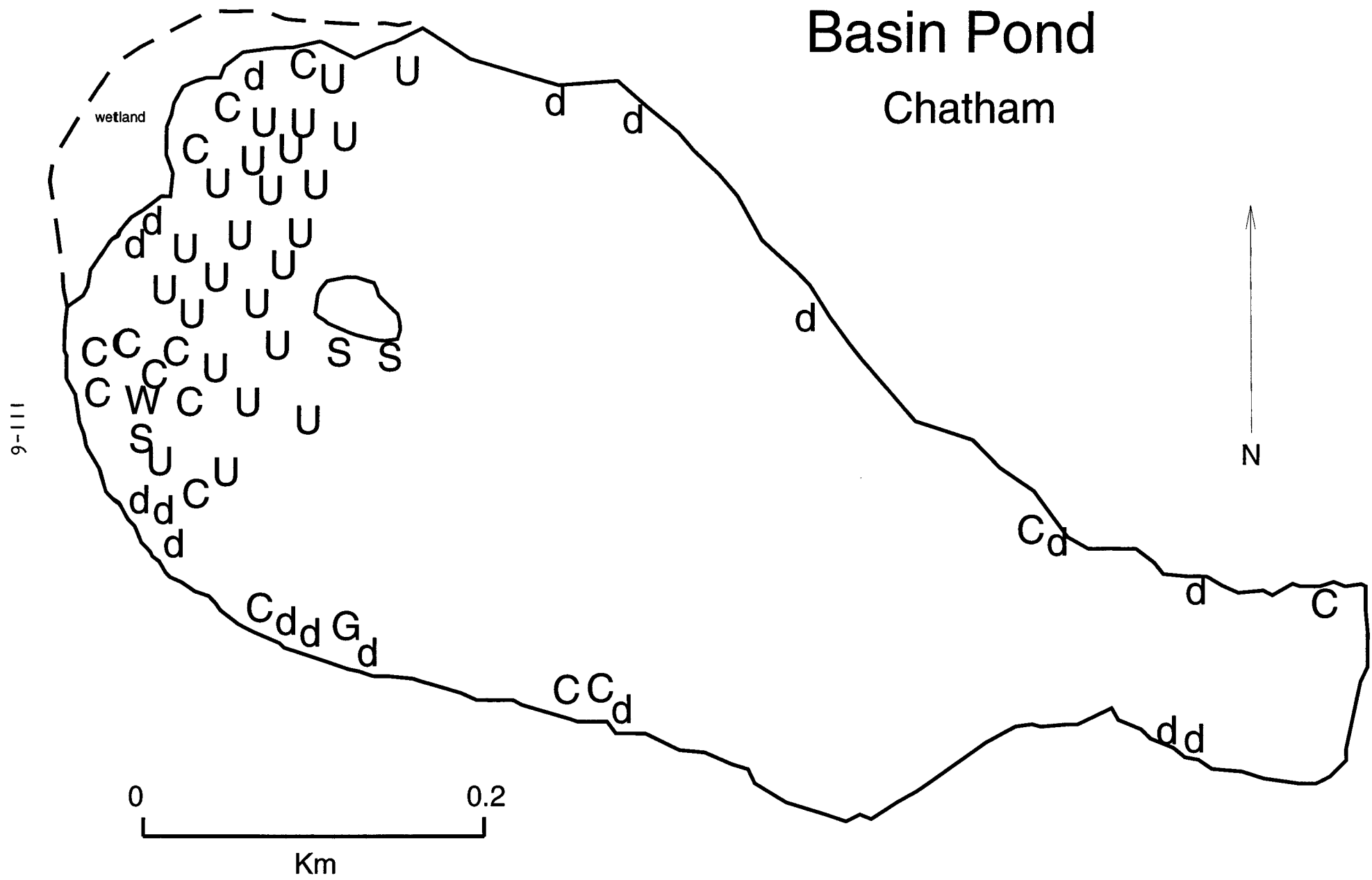
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SECCHI DISK (m):      3.0           COMMENTS:
BOTTOM DEPTH (m):     3.8
TIME: 1255

*Dissolved oxygen values are in mg/L
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Basin Pond

Chatham



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